Under reconstruction! We apologize for the absence of certain materials.

Security of Ukrainian energy supplies and projects for hydrocarbons sources diversification.

28 September 2007

The presentation at the Ukrainian oil and gas trading and transporting conference, Kyiv, 27 September 2007.

My presentation deals yet again with the security of energy supply. Why? First, in September this year the European Union and Russia have offered new draft legislation focussing on limitation of access for foreign investors to energy sector to ensure security of energy supply.

The EU legislation package is more widely known: let me therefore name the Russian piece legislation approved by the State Duma in the first reading – this draft law was developed by the Federal Government and it is titled Procedures for Foreign Investment in Commercial Companies of Strategic Importance for the National Security in the Russian Federation.

A similar legislation to be developed and approved by Verkhovna Rada of Ukraine is long overdue. On the one hand, this law should prevent foreign investors from owning controlling interest in the critical energy companies, on the other hand, it should provide for partial private participation.

Second, the majority of international energy summits deal precisely with energy supplies security – therefore, this indeed a priority international issue.

Third, security of energy supplies is one of the few international issues where Ukraine gets a regular mention, especially in the context of EU energy policy.

In the last few years security in the European energy sector has not improved, unfortunately. Earlier joint effort – or, rather, joint laments – in the EU, addressed mainly to Russia, changed nothing. The main issues are the interrupted supply of oil and gas to Belarus and Ukraine as well as Gazprom's expansion in the European energy markets.

As I was saying, September this year started another, and a more rigorous phase in the discussion between Russia and the EU regarding further mutual restrictions. When the legislation will be passed, and what exactly form it will take, and whether it will be passed altogether – are open questions as yet.

Hence the security of energy supply will have to be addressed independently – either in alliance with other countries or individually.

In our opinion, the most serious threats in short term in Europe will be as follows:

First, the growing oil prices internationally – oil prices are record-breaking in the world's largest exchanges. This is happening in spite of the OPEC resolution to increase the quotas by 500,000 bbl/day. This decision was not a simple one for the OPEC – a vast number of the OPEC member states opposed this decision, and the declared oil production increase remains insignificant. The reason for this is the fact that the quotas were increased within the tolerance margin for non-observance by the member states, who systematically overproduce above quotas.

The increase is only about 0.5% of the global production and is not much more than a goodwill gesture towards consumers.

I would like to remind as well that from October 1 2007 the export tax on Russian crude will rise by over $26, amounting to over $250 per ton. This will be the absolute record throughout the history of the Russian customs system.

Countries with contracts for supply of natural gas tied to the petroleum products will feel the prices on natural gas rising, too, after the corresponding time lag.

Secondly, there is little doubt that this year again there will be problems with gas supplies from Russia, primarily in the CIS countries. The biggest issues are expected to arise in negotiations between Gazprom and the largest transit countries and consumers – Ukraine and Belarus – jeopardising again European energy supply.

Thirdly, tension is expected to intensify between Russia and the EU in the energy sector. Gazprom is difficult to cooperate with, even for strategic partners.

An example: last year a German concern called E.ON was planning to sign a framework agreement with Gazprom for the development of the Yuzhno-Russkoye gas field to provide gas for the Nord Stream project (a subsea gas pipeline in the Baltic). However, the two largest European companies could not agree on this gas field, which should have been launched in October this year.

Another example: recently Exxon Neftegas, an American company involved in Russia's largest oil and gas project Sakhalin-1 received a proposal from Russian public authorities and top management of state-owned companies to sell all of its gas produced in Russia directly to Gazprom. The company had concluded a contract to export gas to China, and now it is being prevented from doing it independently.

An earlier example of Shell being forced to share its assets with Gazprom – again on Sakhalin – I will not dwell upon.

Such examples are very 'contagious' – I am referring to the Kashagan field in Kazakhstan and Azeri-Chirag-Guneshli fields in Azerbaijan.

In our opinion, the barbaric state capitalism such as we see in Russia, and discrimination of investors by their nationality are equally unacceptable. This is explicitly prohibited by the EU legislation.

On the one hand, further intensification of the conflict between the EU and Russia without positive steps taken to enhance cooperation will not enable the EU to develop long-term cooperation with Russia as an energy supplier.

On the other hand, Russia on its own, without Western capital and technologies, will not be able to increase significantly its production of natural gas, which is stagnating currently.

This situation will also endanger Ukraine's position as the largest transit partner and consumer of natural gas coming from Russia. Moreover, the clash between the EU and Russia will enhance the Eastern dimension of hydrocarbons supply, primarily, to China.

If Ukraine's intentions are genuinely to become part of the civilised Europe, then energy supply security issues need to be addressed fro the international community perspective, rather than simply trying to get other countries involved in solving the issues arising between Russia and Ukraine. All the more so since, as we have seen in recent years, the European Union does not interfere in energy conflicts between Russia and the CIS.

Despite the multifaceted nature of energy related dialogues in Europe, as of today permanent arrangements uniting the interests of suppliers, transit countries and consumers still have not be found. Ukraine must contribute to having such arrangements in place. In doing so, it should not try either to get unilateral preferences or be treated as a junior partner. Ukraine's transit potential is one of the largest in Europe and gives us the arguments and opportunity to make a significant contribution in improving Europe's security of energy supplies.

The objectives of Ukraine's oil and gas industry are not simply to ensure transit of large volumes of hydrocarbons and considerable public revenue, but to guarantee as well sustainable supply of energy to Europe, integrating with the European energy markets even closer.

Whereas for the USA and EU the main threat today is terrorism, for Ukraine it is the use of energy resources in politics. For Ukraine security of energy supply and national security are synonymic.

The Russian elite has demonstrated in practice that energy supply will be systematically used in the CIS in large scale political issues.

No other country (such as the USA) or a union of countries (such as the EU) will not be able to provide Ukraine tangible support. The USA is long way, and the majority of the EU leading members are suffering from far-sightedness, not seeing their neighbour – Ukraine. They only see Russia, because they are looking through the pipeline. EU's increasing dependence on Russian energy supplies deprives Ukraine from tangible political support in conflicts with Russia over energy.

Expecting quick accession to the EU, which may seem to solve all Ukraine energy problems, is not only naive, but harmful thinking as well. We should be looking at Turkey as an example – their transit networks are growing year on year, despite the fact that the chances of joining the EU in the 15 year perspective is the same as in our case – that is, minimal.

However, Ukraine still remains attractive from the geo-strategic perspective to build new shorter and cheaper routes for supply of considerable hydrocarbon reserves from the CIS to Europe and, primarily, to use existing pipelines to the maximum. Here we should be looking not only towards our own benefit, but our partners' interests as well, including Russia.

One of the key elements of maintaining security of energy supply is to diversify the sources and supply routes.

Diversification means varying, making versatile (diversus – varying, facere – to make). The classical definition of diversification in post-Soviet economy is the phrase "not putting all your eggs into one basket".

Problem description. Ukraine imports around 53-54% of energy resources; by international standards such a level of dependence is outrageously high. However, the problem is that Ukraine imports the largest part of energy (around 60% of all imports) from just one country – Russia, either directly or transited via Russia. In this situation the dependence of Ukraine's energy industry and the economy in general on imports of energy is critical.

Possible implications. It is widely accepted that import of energy is secure if they are coming from at least three sources, otherwise the following risks exist:

- monopolistic energy price increase or limited supply in case of political conflict with the exporting country;
- critical dependence on the exporting country, which makes equal bilateral relationship difficult to establish and maintain;
- decreased supply in case of lower production (e.g. in Russia natural gas production has been stagnating for a number of years already);
- lasting interruptions in energy supply in case of large scale accidents on trunk oil pipelines (e.g. as a result of natural disaster or human factor, sabotage or age-related deterioration of the pipeline systems etc).

These factors are not inherent solely to the relationship between Ukraine and Russia – they will be in relations with any other exporting country. Therefore, Ukraine's strategic objective is to reduce dependence on any one country to supply energy resources.

Yet, no EU document does make a mandatory provision that at least three sources of energy supply should be available.

Advantages. Diversification projects in Ukraine will have the following advantages: improve the reliability of energy supply; provide the opportunity to negotiate lower prices thanks to competition between suppliers; provide the basis for equal standing in cooperation with Russia; improve Ukraine's security regarding energy supply.

Limitations. Diversification projects are being hindered by the following factors: Firstly, they are extremely costly – construction of oil and gas pipelines, establishment of our own nuclear fuel cycle or its elements costs hundreds or thousands of millions of dollars.

Secondly, in view of the difficult economic situation in Ukraine and an unfavourable investment climate (and high risks for investors) creating full scale alternative sources of energy supplies in the near 10 to 15 years will be feasible.

Thirdly, at the early stage alternative supply of energy can be even more expensive than from existing sources.

Fourthly, even in the long term perspective abandoning Russian supplies will be impossible and, of course, economically unviable. We are therefore 'doomed' to cooperate with Russia. Building a partnership of equal parties is of mutual benefit for both countries. For Ukraine, for instance, being a neighbour of an owner of large hydrocarbon reserves with a well developed oil and gas infrastructure means minimal transport costs.

Today we have only a few officially declared or confirmed international diversification projects, namely:

- Odessa-Brody-Plock oil pipeline;

- import of natural gas from Iran;

- connection to Nabucco gas pipeline.

Let us review them briefly.

Odessa-Brody-Plock oil pipeline project

On the face of it, today there are no obstacles remaining in the way of this long discussed project. The number of people opposing the project in Ukraine as well as in Poland has become very low.

It has received recently international political support.

Firstly, as is known, the EU represented by the European Commission has supported the project. In 2003 the Commission decided to allocate EUR 2 m from the 2005 budget of the INOGATE programme to finance the feasibility study of the Brody-Plock segment.

After that a tender was announced to provide economic, financial and legal consultancy to the concept of the project to transport oil from Odessa via Brody to Plock.

In July 2004 Ukrtransneft and the Polish oil transportation monopolist PERN Przyjazn S.A. (PERN) established a company called Sarmatia – an international pipeline company to complete the Odessa-Brody pipeline by connecting to Plock.

In the summer 2005 a consortium of SWECO PIC (Finland), ILF GmbH (Germany) and KANTOR (Greece) won the European Commission's tender to carry out the feasibility study of the Brody-Plock segment of the pipeline.

On 21 December 2005 the trilateral working group of Ukraine, Poland and the EC met in Warsaw to discuss the Odessa-Brody-Plock pipeline. At the meeting the introductory findings of the feasibility study were presented by the consortium of SWECO PIC (Finland), ILF GmbH (Germany) and KANTOR (Greece). According to the experts, the project's commercial attractiveness was confirmed. It was stressed that this project was very important for the development of Caspian oil transit. The tariffs and the price of crude to be transported over the pipeline were found competitive.

In March 2006 the Consortium made a presentation of the final version of the feasibility study for the project to build the Brody-Plock segment.

As Faouzi Bensarsa, representing of the EC Directorate General for Energy and Transport, said on 15 March 2006 in Warsaw, the Commission was planning to receive first supplies of the Caspian oil over the Odessa-Brody-Plock pipeline in 2009.

"We expect the pipeline should start operating in 2009", says Faouzi Bensarsa. According to European experts, the construction would take around 18 months. Faouzi Bensarsa stressed that research showed a growing market for the Caspian oil in Europe and increased production, which ensure the future of the project.

The final version of the business plan should be completed jointly with potential investors.

Secondly, at the Krakow informal energy summit on 11 May 2007 the Presidents of Ukraine, Poland, Georgia, Lithuania and Azerbaijan made a political decision to support the Odessa-Brody-Plock-Gdansk (OBPG) pipeline project and create an international transport corporation to supply Caspian oil to Europe. Kazakh deputy minister for energy and mineral resources Lyazzat Kiinov also took part in the summit.

Heads of the five countries and Lyazzat Kiinov signed a communiqué for cooperation in the energy sector. The communiqué said in particular: "The meeting participants agreed to intensify cooperation by initiating work on an intergovernmental agreement regulating the participation of states and companies in the project to use a corridor for the transportation of Caspian oil to European and world markets (Odessa-Brody-Plock-Gdansk pipeline). The delegations agreed to create an intergovernmental working group on energy issues on the level of respective ministers.

The dialog initiated here will be continued in October this year during an energy meeting in Vilnius in.

Thirdly, on 18 and 19 June 2007 Baku in Azerbaijan hosted the GUAM summit. One of the key topics was supplies of Azeri oil via the Odessa-Brody pipeline. President of Azerbaijan Aliyev confirmed his country's willingness to participate in the project. "There is a serious political will of our countries, there are the resources. Azerbaijan is becoming a large oil producing country" said the president.

The leaders of the GUAM summit signed the Baku Declaration. The document stresses the need to intensify effort to use the transit potential and create the GUAM transport corridor.The Declaration reaffirms the will to contribute to the improvement of the global energy security.

Presumably, the issue of Azeri oil supplies will be discussed in detail at the next GUAM summit planned to take place in Tbilisi in the summer 2008.

Today some experts say that there is a force in Ukraine unwilling to launch the Odessa-Brody pipeline project. However, the terms of the addendum singed on 26 December 2006 to the contract of 16 November 2004 between Ukrtransnaft, Transneft and TNK-BP for transportation of at least 9 m MTPA to the Yuzhny terminal allow changing the

Today some experts say that there is a force in Ukraine unwilling to launch the Odessa-Brody pipeline project. However, the terms of the addendum singed on 26 December 2006 to the contract of 16 November 2004 between Ukrtransnaft, Transneft and TNK-BP for transportation of at least 9 m MTPA to the Yuzhny terminal allow changing the transportation mode within a very tight schedule, if the contracts to use the pipeline to Brody are signed.

Therefore, today there no technical nor legal issues preventing the redirecting the oil stream northwards.

Conslusions: As of today, the following key issues have not been resolved:

- there are no suppliers of Caspian oil, since there are no international agreements signed nor contracts with oil producing companies in the Caspian Sea region – just as with potential consumers;

- there are no arrangements in place for international cooperation and cooperation between oil companies;

- Poland has not approved a single practical decision to build its part of the pipeline.

Therefore, it is unlikely that the project will be completed in 2009.

The Odessa-Brody pipeline and Yuzhny terminal were commissioned around 5 years ago. According to the Concept of the State Policy for Supply and Transit of Crude Oil, their main purpose was to decrease Ukraine's dependence on a single source of oil supplies via diversification, as well as to ensure transit to Central and North-Western Europe. In spite of this, the stated objectives have still not been met, and the oil goes over the pipeline in 'reverse' mode.

The most reasonable opinion of the Odessa-Brody-Plock pipeline situation is that given by the president of Azerbaijan on 13 September 2007. He said that Azerbaijan was not sure of its benefits under the project. "The Polish and Baltic markets are very attractive for us, and there is strong political support for this project, but for it to be viable the economic environment has to be very favourable".

The latest news on the Odessa-Brody is an order issued by the Ukrainian Cabinet whereby a number of ministries and agencies were committed to arrange for the development of the project to transport oil from the Caspian Sea region to the EU over the Odessa-Brody system. One of the paragraphs in the document stipulates the need to negotiate with Iraq and Turkey an oil transportation corridor from Kirkuk (Iraq) via Trabzom (Turkey) to Yuzhny (Ukraine) and commission a feasibility study.

This order is indicative of yet another attempt of yet another government to revive the interest of potential investors and owners of oil resources to using the Odessa-Brody pipeline in normal direction mode.

You will recall that currently the situation in the Black Sea basin region is that supply exceeds demand due to the fact that oil flows from Russia – a world's leading oil producer – as well as Kazakhstan and Azerbaijan all meet there. Moreover, this tendency is likely to continue in the long term.

As a consequence, unlike the Government of Ukraine, not a single international oil company has the objective to attract additional oil flows from the Arabian Gulf to the Black Sea region.

On the contrary, billions of dollars are being invested in pipelines to take excess oil to other, more attractive markets and resolve the long standing issue of the Turkish straits.

Moreover, on 25 April 2007 the official ceremony of launching the construction of the Samsun-Ceyhan pipeline in the Turkish town of Ceyhan. The pipeline will be 555 km long and have the initial capacity of 50 m MTPA (potentially up to 70 m MTPA), which will connect Turkey's Mediterranean and the Black Sea coasts. In other words, Turkey plans to carry oil from the Black Sea region in the opposite direction compared to the plans of the Ukrainian cabinet.

This is in addition to such 'trifles' as the lack of the necessary infrastructure in Kirkuk to transport oil to Samsun, the civil war in Iraq etc.

However, there are two other pipeline projects ready for practical implementation, which should create a practical bypass of the Turkish Straits. I am referring to the Burgas-Aleksandroupolis and the Constanta-Trieste oil pipelines.

In this context we should also recall the Baku-Tbilisi-Ceyhan pipeline with the maximum capacity of 50 m MTPA (currently operating at only 40% capacity), which was successfully completed in 2006.

The list of other, less promising projects in direct competition to the Odessa-Brody pipeline, does not end here.

International oil markets operate under heavy global competition, therefore the players are under constant pressure to increase profitability of their operations. This means that only economy directs oil flows from regions with excessive supply to the markets where the demand is not satisfied.

Moreover, in the majority of countries pipelines are built by oil companies instead of governments, and the state only provides assistance.

Until potential investors see economic advantages of the project compared to competitors, until there are a clear business plan and a cooperation mechanism for all potential partners in place, the project will not go forward. Another prerequisite is that the other projects currently underway, such as the Baku-Ceyhan pipeline, should be completed (i.e. operating to the full capacity). This requires a drastic increase of oil production in Azerbaijan and Kazakhstan, and will take at least 2-3 years to accomplish.

The Nabucco project

As we know, it is mentioned in the Energy Strategy of Ukraine till 2030. President Yushchenko declared that Ukraine was interested to take part in the project.

However, Ukraine's participation is very unlikely.

Firstly, the future of the project itself is unclear to its official participants. The construction and, correspondingly, the launch, will most probably be postponed again. The key issue is the lack of long term agreements to fill the pipeline capacity. Initially it was planned to transport natural gas from Iran and Iraq, which for the reasons well known, will not be possible in the near 8 to 10 years.

Even if France and Azerbaijan join in the project, the excessive capacity problem still remains, and Azeri gas alone will not be enough to fill that.

Secondly, participation of Turkmenistan and, possibly, Kazakhstan via the Transcaspian gas pipeline (to be built) is not feasible yet. The uncertainty over the status of the Caspian region is a serious impediment to the project.

Moreover, Turkmen reserves have not passed international audit, and the number of international contracts signed exceeds the level of hydrocarbon reserves indicated by the Turkmen officials.

Thirdly, even if the issue of supplying natural gas to the Nabucco project is resolved, it will be difficult for Ukraine to get in and redistribute to its own benefit the gas volumes, already allocated to the participant states.

Supply of Iranian gas to Ukraine

Finally, we will review supply of Iranian gas to Ukraine. Ukraine has signed a number of memoranda of understanding with Iran to supply natural gas. In view of the problems with Iran's nuclear dossier gas supplies from this country in the near 8 to 10 years cannot be seriously considered. This is an optimistic scenario, that is, if there is no military action taken against Iran.

However, the world's second largest gas reserves will make their way to the global market in the long term, provisionally, Iranian gas will be supplied to Europe in 12 or 15 years.

Conslusions: Our estimates show that in the short term, i.e. within 1 or 2 years, none of the projects named here will be implemented.

In the medium term (within 5 years) the Odessa-Brody project may be realised, but subject to the conditions described earlier.

In the long term (15 years) there is a possibility to have natural gas supplies from Iran.

Obviously, this is only an estimate.

It should be noted, that if there are cardinal changes on the Eurasian map of hydrocarbons supply Ukraine will join new diversification project either as a direct participant or indirectly by offering its pipelines to be used in other countries' project, e.g. the Caspian project. This last project, in turn, can lead to construction of a new pipeline going from Aleksandrov Gai via Novopskov to Uzhgorod, or its modifications.

It should be noted, that if there are cardinal changes on the Eurasian map of hydrocarbons supply Ukraine will join new diversification project either as a direct participant or indirectly by offering its pipelines to be used in other countries' project, e.g. the Caspian project. This last project, in turn, can lead to construction of a new pipeline going from Aleksandrov Gai via Novopskov to Uzhgorod, or its modifications.

In the last few years quite a few new pipeline project have been initiated to supply hydrocarbons to Europe. (I will not cover the Eastern vector of oil and gas supply here for obvious reasons).

Unfortunately, Ukraine has been left out of the majority of these projects, even though each new government takes initiatives to join this or that project.